

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

Verizon North Inc. (f/k/a GTE	:	
North Incorporated) and	:	
Verizon South Inc. (f/k/a GTE	:	
South Incorporated)	:	
	:	Docket No. 00-0812
Petition seeking approval of Cost	:	
Studies for Unbundled Network	:	
Elements, Avoided Costs, and	:	
Intrastate Switched Access Services	:	

**SUPPLEMENTAL BRIEF OF THE STAFF OF
THE ILLINOIS COMMERCE COMMISSION – INITIAL ROUND**

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August 1, 2003

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INITIAL BRIEF ON ALJ's ISSUE LIST OF THE STAFF OF THE ILLINOIS COMMERCE COMMISSION

The Staff of the Illinois Commerce Commission ("Staff"), by and through its counsel, and pursuant to Section 200.800 of the Commission's Rules of Practice, 83 Ill. Adm. Code 200.800, and pursuant to the Administrative Law Judge's (hereafter "ALJ's") Order of July 11, 2003, respectfully submits its Initial Brief on the ALJ's Issues List in the above-captioned matter.

I. Introduction

In its early stages, the above-captioned proceeding was separated into three phases, the first of which was convened to "review a cost model submitted by Verizon in conjunction with its original filing and the application of that cost model to access charges." Tr. at 5. Pursuant to this directive, the parties submitted testimony and hearings were held and evidence taken. *See, generally*, Tr. at 18-130. The parties submitted their Initial and Reply Briefs, but the ALJ determined that these briefs failed to adequately frame the issues presented in Phase I, and directed the parties to submit additional Briefs addressing the following issues.

1. Whether ICM [the Verizon cost model] models the correct copper loop lengths and resulting number of DLCs;
2. Whether it is appropriate for ICM to model two separate local loop networks;
3. Whether ICM accurately models customer locations;
4. Whether ICM is flexible and readily open to inspection and testing;
5. The impact of ICM on UNE pricing, as a mode of analyzing ICM in Phase I;

6. Whether the Commission should order the use of FCC proxies as interim UNE rates.

See ALJ's Order (July 11, 2003.)

In addition, in a prior Order, the ALJ directed the parties to answer specific questions associated with assertions or arguments made in their Initial and Reply Briefs. See ALJ's Notice (June 23, 2003)¹. The questions posed to the Staff are as follows:

1. Staff asserts that Verizon has admitted that ICM "cannot model fewer DLCs, even under the 18-kf loop-length restrictions" (Staff Brief at 10). This assertion is supported by a citation to Verizon Exhibit 2.0 at 14,15, yet a review of this exhibit reveals no such statement. Is Staff's position that ICM is not subject to modification and if so, what is the support for the assertion?
2. In terms of demand figures, Staff argues that new demand figures cannot be imputed into ICM. What is the basis of this assertion?
3. Staff also argues, in the portion of its Brief discussing access charges, that Verizon failed to supply the demand figures used in its computations. Verizon replies, in a Section titled "Switching Costs" that it was not required to perform the calculation requested by Staff. Is this issue part of the settlement of access charges? How does the assertion that a calculation was not required respond to the assertion that demand figures were not provided?
4. Staff includes a subsection (2) Methodology for Switched access and UNE Rates is Deficient) in a section of its Brief apparently addressing only Switched Access (B. Switched Access Rates Inconsistent with State and Federal Law). Do the arguments in the subsection go only to switched access and are they the subject of the switched access settlement?
5. Are the arguments in (3) Allocation of Cost Methodology is Unsupported limited to switched access and subject to the settlement of those issues? Do the arguments relating to Common costs go to inputs or inherent flaws in ICM?

See ALJ's Notice, Attachment at 2-3

¹ The ALJ subsequently indicated that, to the degree the questions posed do not relate to the issues contained in the July 11 issues list, they need not be answered.

The Staff will respond to the July 11 issues, and then to the June 23 questions as needed.

II. Argument

A. ICM does not model the correct copper loop lengths and resulting number of DLCs

ICM is hard coded to offer the user only three network configuration options, each of which is highly inefficient. The first option permits 6 megabits per second (“mbps”) data transmission rates over all access lines in Verizon’s network in Illinois. Verizon Ex. 1.0 at 24. This is accomplished by restricting the copper portion of the loop length from exceeding 12 kFt,² utilizing a 24-gauge copper pair wire. *Id.* The second option also restricts the copper portion of the loop to a maximum 12 kFt; however, this option utilizes a less expensive 26-gauge copper pair wire. *Id.* The third option is a network with a maximum copper portion of the loop length of 18kFt, again utilizing the more expensive 24-gauge copper pair wire. Although Verizon acknowledges that the bandwidth of the network is diminished under the second and third options, the company does not specify the bandwidth capability of either of these networks. Verizon Ex. 1.0 at 17.

Staff has identified two significant aspects of ICM that cause these network configurations to be inefficient. First, ICM’s choice of digital loop carrier technology (“DLC”) is inappropriate. Second, the number of DLCs modeled by ICM is excessive. The result of these two factors is that the modeled network is inefficient.

² “kFt” is an abbreviation for “kilofeet,” a unit consisting of 1,000 feet.

1. Choice of NGDLC equipment is inappropriate

Next generation digital loop carriers (“NGDLCs”) are technologically advanced DLCs that allow for the provisioning of data services to customers that are beyond 18kFt from the serving central office. NGDLCs are much more costly than traditional DLCs as a result. This is significant, as the network modeled by ICM is populated exclusively by NGDLC systems. In the interest of overall efficiency and keeping network design concerns in mind, traditional DLCs should be applied to some degree in ICM, as opposed to using NGDLCs exclusively throughout the entire network. Verizon has never addressed nor has it provided any justification in this proceeding for why NGDLCs are appropriate for its entire network.

The appropriate TELRIC cost of the loop should be reflective of a reasonable, efficient planned network. The use of traditional DLCs in certain areas of the network would be more efficient than the completely NGDLC-served network modeled by ICM. NGDLCs are certainly needed, to some extent, in a forward-looking network. However, Verizon appears to assume that forward-looking networks must contain the most advanced capabilities possible throughout the network, and ICM therefore requires NGDLC placement throughout the modeled network for UNE rate development.

2. ICM models an inefficient number of DLCs

The number of DLCs modeled within the network modeled by ICM is also unwarranted. The company contends that ICM cannot model fewer DLCs, even

under the 18-kFt loop-length restriction options. Verizon Ex. 2.0 at 14, 15. While this assessment of ICM's capabilities is accurate, it only further supports the notion that ICM is not sufficiently adaptable for developing appropriate TELRIC-based UNE rates. In fact, Verizon acknowledges that there are more DLCs modeled in the ICM network than exist in Verizon's actual network in Illinois. Verizon Ex. 2.0 at 14. Clearly, this supports the proposition that ICM is inadequate because it cannot be adjusted to reflect a more reasonable network, which is to say one that assumes a reasonable number of DLCs, rather than an excessive number.

Although Verizon maintains that the cost of circuit equipment investments, as modeled by ICM, are actually lower than the reproduction cost of the existing network, Verizon Ex. 2.0 at 15, Attachment DGT-1, this contention is difficult to accept. As a general matter, calculations of reproduction cost of a network are speculative in nature. In other words, the company's use of this data to support its position is not based on an actual accounting of current investment costs but rather a guess at what those costs might be if reproduced today. Such data is therefore inherently unreliable and not suitably comparable to forward-looking TELRIC costs. Fundamentally, network reproduction models are inherently based on subjective assumptions made by the model's designers, and typically, like Verizon's, utilize proprietary information that can be difficult to discern and nearly impossible to subject to cross-examination.

Moreover, even assuming for the sake of argument that Verizon is correct, and circuit equipment prices of the ICM modeled network are indeed lower than the actual reproduction costs of the existing network, this argument is nonetheless

irrelevant. If the ICM placement of DLCs is inefficient, its cost in comparison to the existing network simply does not matter. An inefficient network – which is to say, among other things, a network with inefficiently placed DLCs – is not LRSIC or TELRIC compliant, regardless of whatever cost is produced by the model. As such, Verizon's ICM modeled network cannot be used as a basis for developing UNE rates in Illinois. Further, the investment in DLCs does not exist in a vacuum. The inefficient placement of DLCs also affects the efficiency of the copper-fiber mix in the network. With too many DLCs modeled, regardless of the investment, there will be too much fiber modeled, which also drives up the cost of the network.

As a basis to support ICM's loop length restrictions, the company cites to the FCC Advanced Services Order (CC Docket No. 98-147), dated March 31, 1999. Specifically, Verizon observes that the Advanced Services Order states that asynchronous digital subscriber line ("ADSL") technology is the most commonly deployed of these technologies. Verizon Ex. 2.0 at 15. The company relies upon this authority in support of its contention that ICM must therefore model a network capable of ADSL speeds throughout Verizon's entire Illinois service territory. Id.

Modeling a network that will support ADSL technology anywhere and everywhere is clearly inefficient. Moreover, advanced data services, pursuant to Illinois law, have a much lower capacity than those modeled by Verizon in this proceeding – 200 kbps in a single direction, rather than the 6 mbps that Verizon's hypothetical network is capable of. Staff Ex. 1.0 at 11, 12; *see also*, 220 ILCS 5/13-517 (advanced services defined as data speeds of 200 kbps). As such, the

company's modeled network is thirty times the legal threshold for advanced data services.

Principles based in both sound public policy and common sense dictate a cost model that inherently lacks the capability of maximizing efficient measures should not be used to develop UNE rates. Reason dictates that, as the ability to provide high bandwidth services in a network increases, so does the cost of the network. The Illinois Legislature has set the penetration benchmark for advanced services availability at 80% of the customer base. 220 ILCS 5/13-517. ICM actually models 100% penetration of technology that, again, greatly exceeds the bandwidth requirements set by the General Assembly. In this case, ICM's network design maximizes broadband capability rather than maximizing overall efficiency, which results in a modeled network higher in capacity than the General Assembly mandates, and higher in cost than a forward looking efficient network.

Finally, but significantly, the network with ubiquitous broadband-capability that ICM models is one that Verizon appears to have no intention whatever of actually building. As noted above, incumbent local exchange carriers in Illinois are required to "offer or provide advanced telecommunications services to not less than 80% of [their] customers by January 1, 2005." 220 ILCS 5/13-517(a). However, this requirement is not necessarily set in stone, as the statute also provides that:

The Commission is authorized to grant a full or partial waiver of the requirements of this Section upon verified petition of any Incumbent Local Exchange Carrier ("ILEC") which demonstrates that full compliance with the requirements of this Section would be unduly economically burdensome or technically infeasible or otherwise impractical in exchanges with low population density.

220 ILCS 5/13-517(b)

On August 30, 2002, Verizon petitioned the Commission for precisely such a waiver. See *Joint Verified Petition of Verizon North, Inc. and Verizon South, Inc.*, Verizon North, Inc. and Verizon South, Inc.: Verified Petition for Certification Pursuant to Section 13-517(a) or Waiver Pursuant to Section 13-517(b), ICC Docket No. 02-0530 (August 30, 2002) (hereafter “Waiver Petition”). In its Waiver Petition³, Verizon asserts that requiring it to comply with the requirements of Section 13-517(a) would cost the company \$329 million, and would therefore be “unduly economically burdensome.” Waiver Petition, ¶¶10-11. The Commission granted a partial waiver, effectively absolving Verizon of any obligation to provide broadband in areas where it currently does not do so. *Order* at 87, Verizon North, Inc. and Verizon South, Inc.: Verified Petition for Certification Pursuant to Section 13-517(a) or Waiver Pursuant to Section 13-517(b), ICC Docket No. 02-0530 (June 24, 2003) (hereafter “Waiver Order”).

This alone compels the rejection of ICM. Verizon proposes here to *model* a network capable of providing DSL service to 100% of the subscriber lines in its Illinois territory, but only for the purpose of setting UNE rates that its competitors will be compelled to pay. When Verizon is called upon to actually *build* a network capable of providing DSL to 80% of the subscriber lines in its Illinois territory, it seeks to exempt itself from doing so because this would be “unduly economically burdensome[.]” Waiver Petition, ¶10, as indeed the Commission found. See Waiver Order at 87 (Commission finds that “the evidence establishes that Verizon’s costs

³ In its *Waiver Petition*, Verizon seeks Commission certification that certain relatively costly high capacity arrangements it provides primarily if not exclusively to business customers, including Frame Relay service, Asynchronous Transfer Mode service, and High Capacity Digital Service, satisfy the requirements of Section 13-517(a). Waiver Petition, ¶¶3, 5-7.

to deploy [broadband] in the Waiver Areas would far exceed any recovery Verizon would realistically expect to receive.”)

Thus, based upon Verizon’s own assertions, and the Commission’s findings, it is difficult to escape the conclusion that UNE rates based on ICM-generated costs would also be “unduly economically burdensome.” As this latter undue burden would fall upon CLECs, however, Verizon appears commendably stoic about it.

Verizon, however, cannot have this both ways. If it does not have the slightest intention of building a network with extensive DSL capability, it cannot attempt to charge its competitors UNE rates that are based upon such a network. Likewise, if the company intends to build such a network, it had no business seeking to exempt itself from the legal obligation of doing so, by asserting that it would be economically burdensome to do so.

Moreover, while TELRIC rates are intended to be forward-looking, and to be based on utilization of the best available technology, the term “forward-looking” does not mean “having the characteristics of science fiction.” In essence, ICM assumes that Verizon will provide its competitors with unbundled elements from a network that is the telecommunications equivalent of a 2010 Lexus concept car. However, it is clear that Verizon intends to charge tomorrow’s prices today for said Lexus, only to deliver a 1983 Caprice Classic.⁴ The Commission should not countenance this.

Verizon also argues that by setting the DLC material and placement investment to zero only causes a \$1.23 reduction in loop cost. See Verizon Ex. 2.0.

⁴ This analogy was recycled from Staff’s Initial Brief. See Staff IB at 14.

As such, the company reasons that Staff's concerns regarding DLC investment are not significant. Staff takes exception to this position. A variation on cost of \$1.23 per loop may prove to be a crucial factor in competitors' decisions to offer service in Verizon territory, or to decline to do so. A recurring charge of \$1.23 is not a minor sum for a CLEC that is competing with an ILEC on a margin that is small to begin with. Moreover, setting DLC investment to zero would not negate the impact the DLC has on fiber-copper placement. Even with a zero investment for the DLC, the DLC still exists in the modeled network and causes fiber to be placed inefficiently, which would have the effect of driving up costs. Therefore, the overall impact of such a reduction ought to be greater than the \$1.23 estimate identified by Verizon.

In summary, then, because of the way that DLC systems are configured, ICM does not model a most efficient, least cost network. The model has but three inefficient configurations available. These configurations produce loops with capabilities that are in no way consistent with the services currently offered or contemplated by Verizon.

B. It is improper for ICM to model two separate local loop networks

ICM models two separate networks: one that assumes that 100% of Verizon's output is sold at retail and one that assumes that 100% of Verizon's output is sold at wholesale. Staff Ex. 2.0 at 25. The model configures the network in a different manner depending on whether the user selects the "Retail" or "Wholesale" option on the Expense User Settings screen. Staff Ex. 2.0 at 25-6; Verizon Ex. 2.0 at 20-21. All of Verizon's shared costs are included in each of these two runs. Verizon Ex. 2.0 at 42-6.

Verizon's "two network" approach is not a reasonable modeling approach, and indeed produces certain nonsensical results. For example, the wholesale estimates produced for line-to-line minute of use investment, line-to-trunk minute of use investment, and trunk-to-line minute of use investment for the end office switch with CLLI ALEDILXDDS0 – ALEDO exceeds those same retail investments. Staff Ex. 2.0 at 26. While this example demonstrates that the wholesale investment estimate exceeds the retail investment for only this *one* particular switch, the fact remains that the problem is a general one; *aggregate* wholesale switch investment in the model exceeds aggregate retail investment as well. Id.

Verizon's model is additionally flawed in its inclusion of all shared costs in both retail and wholesale versions of its network cost models. See Staff Ex. 4.1 at 7. The FCC definition of shared costs, set forth in the *First Report and Order*,⁵ is that shared costs are particular only to groups of services, as follows:

We use the term "joint costs" to refer to costs incurred when two or more outputs are produced in fixed proportion by the same production process (*i.e.*, when one product is produced, a second product is generated by the same production process at no additional cost).⁶

By definition, retail shared costs should always be different from wholesale shared costs. Verizon's inclusion of all shared costs in both the modeled "wholesale" network and the modeled "retail" network suggests that Verizon's

⁵ First Report and Order, In the Matter of implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, CC Docket Nos. 96-98 and 95-185. FCC 96-325, 11 FCC Rcd 15499(released August 8, 1996) (hereafter "First Report and Order").

⁶ First Report and Order, ¶ 676

methodology distorts its identification and proper allocation of shared wholesale costs to price estimates for unbundled network elements.

The results of this curious exercise have wholesale costs exceeding retail in one major network component. Indeed, Verizon concedes that this is the case.⁷ Verizon Ex. 2.0 at 21. Thus, to be clear, Verizon has somehow concluded that its switching investment is higher when it provides UNE switching to CLECs than it is when it provides either switching as part of switched access to long distance carriers or when it provides switching to itself to serve its own customers. This obviously cannot be.

Verizon's "two network" approach does not even survive a simple reality check; Verizon has not deployed two independent networks to serve retail and wholesale customers in the past, and the Commission can be utterly confident that the company does not intend to do so in the future.⁸

Verizon acknowledges that this methodology does not reflect its current network configuration. Verizon Ex. 2.0 at 38. Instead, it simply asserts that by using this modeling approach both retail and wholesale cost estimates produced by Verizon are lower than they would otherwise be. Id. However, Verizon has provided no cost estimates that would support such an assertion. In particular, the Commission should not accept a methodological choice that is, as Verizon seems to assert, results driven.

⁷ Verizon contends, however, that the difference is "not significant." Verizon Ex. 2.0 at 21

⁸ If – as is undoubtedly the case, see *Waiver Order* – Verizon balks at building a network that is 80% DSL capable, it can be presumed to have no intention of replicating its public switched network.

Verizon might argue that in practice it may provision UNE loops in a manner different than what is modeled, and that the modeled approach is the lower cost alternative. It might further argue that its approach of assuming an “all wholesale” network when estimating UNE switching investment and an “all retail” network when estimating switched access or retail switching investment will yield higher fill rates than assuming a network that is configured partly to serve UNE customers and partly to serve retail and switched access customers. Verizon might also argue that, over time, the proportion of total customers served by it, as opposed to CLECs, will fluctuate.

Such arguments are deficient in two respects. First, the fact that Verizon’s actual practice does not match the forward-looking practices it models provides yet another example of the confusion in Verizon’s approach to TELRIC modeling. Verizon’s argument here can be reduced to the bare assertion that the Commission should accept the methodology because it produces a lower cost⁹—not because it is correct and TELRIC-compliant. Staff Ex. 2.1 at 11.

Second, the notion that Verizon might have to switch lines from retail configurations to wholesale configurations and back is ill-conceived. Verizon has proposed numerous non-recurring costs for carriers that request UNEs. See Verizon Ex. 7.0 (Verizon witness Barbara Ellis sponsors non-recurring cost study¹⁰ and proposes non-recurring charges). Any justifiable costs associated with converting lines from retail type configurations to wholesale type configurations are

⁹ Staff does not by any means concede that this practice in fact produces lower costs.

¹⁰ Verizon’s NRC rates are somewhat difficult to determine from Ms. Ellis’ testimony and schedules. See Staff Ex. 3.0 at 3.

properly included in such non-recurring costs. Thus, reference to these costs when examining recurring cost investment figures is misplaced.

Staff agrees, however, that such an approach will, in theory, produce higher fill factors than an approach which models a single dual-purpose network with the respective wholesale and retail type configurations used by Verizon. Further, Staff believes there is some merit in the position that a cumulative difference of 0.5% (in total modeled investment) may be insufficient to justify the additional correction, particularly as further complexity may create additional problems. In sum, despite the shortcomings in Verizon's position, Staff accepts Verizon's approach to generate switch investment. With respect to accuracy, however, Staff notes that such an approach may influence the allocation of shared and common costs between wholesale and retail products and services.

Staff cannot recommend the adoption or use of a methodology that models two different network architectures depending on whether the model is used to estimate retail or wholesale costs.

Staff therefore recommends that a necessary condition of acceptance of Verizon's model be that the model be modified so as to produce a single network and a single set of costs consistent with that network. It is necessary that any division of the costs of this single network between retail and wholesale components sum to no more than the total of the costs of the single network, thereby precluding any possibility of the type of unreasonable estimates produced by Verizon's existing configuration.

C. ICM does/does not accurately model customer locations

The Staff has no position on this issue.

D. ICM is somewhat flexible but not readily open to inspection and testing

ICM is a large, extremely complicated model. Staff Ex. 5.0 at 8. The model is designed in such a way as to render it difficult for the average user to manipulate data. Id. Further, given the large size of the model, the flexibility touted by Verizon in this proceeding is unlikely to inure to the benefit of a typical user, Id., although this can be alleviated if the user devotes a significant amount of time to familiarizing him- or herself with the model. Staff Ex. 5.1 at 8. The database design coupled with embedded Pascal language codes makes the model user-unfriendly, at least to users not familiar with Pascal, Id., although translating Pascal mapping codes into Excel formulae fosters greater ease of use. Staff Ex. 5.0 at 7. The ICM User Guide is oversimplified and not helpful to typical users, Id. at 8, as it lacks clear instructions regarding how to perform input modifications. Staff Ex. 5.1 at 4. Further, the User Guide fails to advise users of certain options that the model offers. See Staff Ex. 5.1 at 5 (User Guide does not indicate that certain material inputs for 3 and 5 pair drops can be altered). Likewise, it is possible to change values of material inputs in a manner undetectable to users. Staff Ex. 5.1 at 6. Staff analysts attempting to perform other tasks using the model experienced a significant degree of difficulty in doing so, as a result of characteristics inherent in the model, until Verizon experts rendered assistance. Staff Ex. 5.0 at 8; Staff Ex. 5.1 at 5-7. However, the

assistance rendered by Verizon, although helpful in yielding a result, nonetheless requires steps not outlined in the Users Guide. Staff Ex. 5.1 at 7.

There are three basic ways that a user can alter Verizon's model: 1) the user can enter values by making selections from the ICM's run time options screen, 2) the user can make changes to the numerous data tables that the ICM draws upon for inputs, or 3) the user can reprogram Verizon's model. Staff Ex. 2.1 at 12. The difficulty associated with making a change to Verizon's model depends critically on which of these three courses of action is required to make the desired change. Id. However, it is not this tiered structure that circumscribes the flexibility and openness of the model; such a tiered structure is a natural byproduct of any cost model. Rather the nature of the assumptions that Verizon makes and includes in each of the three categories determines the flexibility and openness of the model. Id. at 12-13.

If, for example that the Commission disagreed only with Verizon's choice of 12 kFt maximum copper loop length and instead required Verizon to elect an 18 kFt maximum copper loop length, Verizon's model, which enables the user to choose between these options from the ICM's run time options screen, could very easily handle this change. Staff Ex. 2.1 at 13. However, if the Commission were to determine that Verizon's K-means clustering algorithm used to model the number and location of DLCs in a wire center was improper, Verizon would need to fundamentally reprogram its model. Id. Therefore, the characterization of the model as flexible depends on whether Verizon can make Commission-ordered changes in assumptions by merely manipulating run time options screens or data

tables used as inputs into the ICM, or whether such changes require Verizon to undertake fundamental reprogramming of the model. Id.

One area in which the model demonstrably lacks flexibility and openness is with respect to the calculation of switching costs. To calculate switching costs, the model makes significant use of output from the SCIS/COSTMOD.¹¹ Staff Ex. 2.1 at 13-14, *citing* ICM Switch Model Manual. The SCIS/COSTMOD information is incorporated into a database entitled ILSWINVW.DB. Id. at 14 *et seq.* ICM draws on the various average investments contained in ILSWINVW.DB in order to produce switched access costs. Id. at 15.

Dr. Zolnierrek attempted to verify that the unit investments contained in ILSWINVW.DB accurately reflect switch costs by adding the categorical investments contained in ILSWINVW.DB for each switch, in order to compare them to the total material investment that Verizon provides for each switch; in other words, to ensure that the sum of the various switching investment components does not exceed the total. Staff Ex. 2.1 at 15. Dr. Zolnierrek was unable to verify that this was the case. Id. Verizon was, in fact, unable to render any material assistance in this exercise. Id. at 15-19.

This problem illustrates ICM's lack of transparency and flexibility. The model fails the transparency test itself, but it accepts inputs which are themselves generated by "black boxes," and which cannot be verified or replicated. Alleviation of this problem apparently entails – assuming that it can be

¹¹ SCIS stands for "Switching Cost Information System." COSTMOD has no further definition, and is presumably derived from Cost Model. See ICM Release 4.2, Model Methodology, Switch Module, Book III of VII.

accomplished at all – substantial revision of the model. Accordingly, it cannot be considered acceptably transparent or flexible.

In summary, the model is reasonably flexible, but significantly lacks audit controls, which permit unauthorized, undetected modifications. Staff Ex. 5.1 at 9.

E. The impact of ICM on UNE pricing, as a mode of analyzing ICM in Phase I

The Staff notes, as an initial matter, that, after hearings and briefing in this proceeding, Verizon and AT&T Communications of Illinois, Inc. (hereafter “AT&T”), after extensive negotiations in which the Staff took part, concluded an agreement regarding the access rates Verizon will charge on a going-forward basis; these agreed-upon access rates are apparently acceptable to other interested parties. The Staff therefore considers the question of *setting* access rates to be a closed one – subject of course to Commission approval, which the Staff recommends be forthcoming.

The Staff however does not conclude from this, and does not recommend, that the evidence regarding access rates adduced in this proceeding should be disregarded. Quite the contrary, the cost information so adduced provides valuable insights into the functioning of the ICM model – indeed, it answers, to a significant degree, the question of whether the model produces reasonable, rational results – a “reality check,” as it were, of the model, and one which, regrettably, the model fails. The ICM model has inherent defects that are disclosed by the access costs it generates. ICM produces TELRIC and LRSIC costs that result in excessive prices. Staff Ex. 1.0 at 9. Likewise, the access

charges developed by the model are inappropriately high. See, *generally*, Staff Ex. 2.0 at 4 *et seq.*

In a declining cost industry, the price of the loop portion of the access line will almost certainly decrease over time. Staff Ex. 1.0 at 9. Verizon's loop costs as developed by ICM, however, have allegedly increased. Id. It is a simple logical conclusion that the loop rate should be less than Verizon's retail network access line rates. Id. However, the ICM develops loop rates that *exceed* retail access line rates. Id. Accordingly, there are two, and only two possibilities: (1) Verizon's current retail access line rates are priced below cost, and need to be increased, or (2) ICM is inflating the price. Id. Since Verizon would certainly not permit the former eventuality to take place without seeking higher rates – and has not done so for at least ten years – the latter must be true.

Verizon-proposed switched access costs are not reasonable estimates of the forward-looking costs of providing switched access services. This is based on a comparison of the proposed LRSIC + Common Cost estimates presented in Direct Attachment TD-5 with Verizon's current interstate switched access charge rates and Verizon's current intrastate switched access charge rates. In addition, the proposed LRSIC + Common Cost estimates submitted by Verizon are inconsistent with findings in previous Commission and FCC proceedings. Staff Ex. 2.0 at 5-6. In almost every instance, Verizon's intrastate switched access services, as described in Direct Attachment TD-5, have identical companion services on the interstate level. Staff Ex. 2.0 at 6. Typically the only difference between such services is whether, once Verizon hands a call off to a long

distance carrier, the long distance carrier transports the call to a location within Illinois or one outside of Illinois (or conversely whether a call handed off to Verizon by a long distance carrier originates within Illinois or outside of Illinois). Id. That is, in virtually all cases the actual functions that Verizon's network performs in order to provide intrastate access service are identical to the functions Verizon's network performs to provide interstate access services. Id. Since this is true, the forward-looking cost of providing intrastate switched access service must logically be very similar to that of providing interstate switched access service. Id.

Intrastate switched access is comprised of approximately 83 rate elements. Staff Ex. 2.0 at 6. Given this large number of individual elements, when comparing Verizon's proposed LRSIC + Common cost estimates to alternative rates or costs, some of the 83 proposed LRSIC + Common cost estimates will inevitably exceed their interstate counterparts. Conversely, some of the 83 proposed LRSIC + Common cost estimates will inevitably be less than their interstate counterparts. Id. at 6-7. For example, Verizon's proposed LRSIC + Common per minute of use cost estimate for Premium End Office Switching *exceeds* the current rate Verizon charges for this service, while the per minute of use proposed LRSIC + Common cost estimate for Shared Trunk Port *is less than* the current rate Verizon charges for this service. Staff Ex. 2.0, Attachment 2.5. Furthermore, usage varies considerably across these 83 elements. Staff Ex. 2.0 at 7. For example, as illustrated in Verizon's response to Staff Data Request 2.1-2.2, Verizon billed 2,200,266,794 intrastate-interLATA access minutes in 2000

while billing for no intrastate-interLATA DS0 monthly switched access cross connects. Staff Ex. 2.0, Attachment 2.7.

In order to provide comparisons of Verizon's proposed LRSIC + Common cost estimates with Verizon's interstate rate counterparts, Staff witness Dr. James Zolnierrek calculated the total revenue produced by each given set of costs or rates based on year 2000 demand. These calculations also compare Verizon's proposed LRSIC + Common cost estimates, and Verizon's Illinois interstate switched access rates, obtained from Verizon's May 2001 FCC access tariff filings, for GSTC service areas, GTOC Zone 1 service areas, GTOC Zone 2 service areas, and GTOC Zone 3 service areas, respectively. Staff Ex. 2.0, Attachments 2.1, 2.2, 2.3, and 2.4. These total revenues reflect the revenue Verizon *would* have collected last year for the entire basket of intrastate access services it sold to customers at each of the different sets of rates. Id. Each Attachment also shows total revenues, based on year 2000 intrastate demand, for the switching and transport portions of switched access services. Id. These figures reflect the total revenue Verizon would have collected last year for the basket of *switching* services sold to customers as part of its intrastate switched access offering, and for the basket of *transport* services sold to customers as part of its intrastate switched access offerings. Staff Ex. 2.0 at 8.

To assess the relative difference between Verizon's proposed LRSIC + Common cost estimates and its existing interstate rates, Dr. Zolnierrek calculated the percentage difference between the LRSIC + Common cost estimate of the year 2000 basket of services and the cost of same basket for each set of

interstate switched access rates. See Staff Ex. 2.0, Attachments 2.1-2.4. Dr. Zolnierrek used the same methodology to evaluate differences for all three classes of charges (total switched access charges, the switching components of switched access charges, and the transport component of switched access charges). *Id.* Using this methodology the comparisons equate to a comparison of switched access cost/price indices using 2000 intrastate switched access demand.¹² Staff Ex. 2.0 at 8.

The conclusion to be drawn from this is a simple one. Verizon earns a substantial interstate rate of return in its GSTC Illinois service areas, yet has interstate access costs in the GSTC Illinois service areas well below the LRSIC + Common cost estimates it submitted in this proceeding. Staff Ex. 2.0 at 9. Therefore, Verizon's LRSIC + Common cost estimates are "marked up" over its GSTC rates for access services despite the fact that the GSTC rates are already well above costs. *Id.*

Based on year 2000 intrastate demand, revenue calculated using rates equal to Verizon's proposed LRSIC + Common Cost estimates is 39% above revenue calculated using GSTC interstate rates in effect in the first half of 2001. Staff Ex. 2.0, Attachment 2.1. Interstate rates of return published by the Federal Communications Commission for price cap services for Verizon's Illinois study areas indicate that, in year 2000, Verizon earned a rate of return¹³ for its GTE

¹² The consumer price index (CPI) is a common example of the use of a fixed basket methodology to track price changes over time. The consumer price index tracks the price of a fixed basket of consumer goods and services over time. Here, rather than consumer goods and services, the fixed basket includes all intrastate switched access services purchased from Verizon's Incumbent Operations in year 2000. See Staff Ex. 2.0 at 8.

¹³ The rate of return presented in the FCC numbers equals the ratio of Verizon's year 2000 operating income to its average net investment.

North Inc. (Illinois – COIL) study area of 41.03% and for its GTE North/GTE South (GAIL) study area of 22.35%. See FCC, Interstate Rate of Return Summary, January 1, 1999 – December 31, 1999, Final Reports Filed April 2, 2000, Price-Cap Carriers.

These rates of return do not *remotely* suggest that Verizon incurred losses in providing interstate access. Quite the contrary, they underscore the fact that Verizon's charges for interstate access significantly exceed the cost to Verizon for providing these services and that, as a result, Verizon earns substantial profits from its provision of interstate access services. Verizon's very high interstate rates of return in 2000, as reported by the FCC, indicate that Verizon's interstate access charges *exceed*, by a substantial margin, the cost it incurs provisioning interstate access services. Because Verizon's LRSIC + Common Cost estimates, in turn, substantially *exceed* Verizon's interstate access rates – which themselves exceed cost – the only possible conclusion is that the LRSIC + Common switched access cost estimates Verizon presents in Direct Attachment TD-5 for intrastate access are unreasonably high.¹⁴

In addition, a comparison of switched access and transport rates reveals that the relative balance between interstate switched access switching prices and interstate switched access transport prices is substantially different than is the balance between Verizon's switched access LRSIC + Common cost switching

¹⁴ Dr. Zolnierrek points out that this comparison should be used with a certain amount of caution. See, *generally*, Staff Ex. 2.0 at 10-11. Specifically, the FCC analysis may include services other than those used by Dr. Zolnierrek in his analysis. Staff Ex. 2.0 at 10-11. Further, Dr. Zolnierrek was compelled by availability of data to compare statistics based on 2000 and 2001 data. *Id.* Nonetheless, it is Dr. Zolnierrek's opinion that the evidence he analyzed "strongly suggests that Verizon's cost estimates are unreasonable[.]" Staff Ex. 2.0 at 10.

estimates and Verizon's switched access LRSIC + Common cost transport estimates. Staff Ex. 2.0 at 11. That is, Verizon loads a higher percentage of its costs on the switched portions of intrastate switched access than it does on the switched portion of interstate switched access. Id.

Verizon's switched access switching costs are *greater than* its interstate rates in GSTC areas by 125%, while Verizon's switched access LRSIC + Common transport cost estimates are *less than* its interstate rates in GSTC areas by 65%. Staff Ex. 2.0, Attachment 2.1. Similar results are produced by comparing Verizon's LRSIC + Common cost estimates to interstate rates in all three GTOC areas. Staff Ex. 2.0, Attachments 1.2, 1.3, 1.4.

This is matter of particular concern. Transport is a smaller component of its intrastate switched access costs than switching. Staff Ex. 2.0 at 12. The fact that Verizon's estimation procedures attribute a large share of costs to switching, relative to its interstate rates, should engender grave misgivings, especially in light of the fact that much of intrastate transport is purchased out of interstate tariffs, Staff Ex. 2.0 at 12, providing Verizon an incentive to shift costs in its estimation of intrastate costs to switching components and away from transport components.

Further, information coming to light in the FCC's *Sixth Report and Order in CC Docket Nos. 96-262 and 94-1*; *Report and Order in CC Docket No. 99-249*; *Eleventh Report and Order in CC Docket No. 96-45*, In the Matter of Access Charge Reform / Price Cap Performance Review for Local Exchange Carriers Low Volume Long Distance Users / Federal-State Joint Board on Universal

Service, FCC No. 00-0193, CC Docket Nos. 94-1; 96-45; 96-262; 99-249, 15 FCC Rcd 12962; 2000 FCC LEXIS 2807; 20 Comm. Reg. (P & F) 636 (May 31, 2000) (hereafter “CALLS Order”) demonstrates that Verizon’s cost estimates are unreasonable. In the *CALLS Order*, the FCC adopted an integrated interstate access reform and universal service proposal put forth by the members of the Coalition for Affordable Local and Long Distance Service (“CALLS”). Prior to their merger, both GTE and Bell Atlantic were members of the Coalition and signatories to the CALLS plan. See CALLS Order, n.1. A key component of the CALLS plan is a reduction in interstate average traffic sensitive charges. The interstate average traffic sensitive charge includes the sum of local switching and transport components of interstate switched access services. See, *generally*, CALLS Order. Each company under the *CALLS* proposal must apply productivity adjustments that would otherwise apply to reducing interstate access components, such as common line components (i.e. the portion of loop charges assigned to the interstate jurisdiction), to the reduction of interstate average traffic sensitive charges. CALLS Order, ¶¶30, 59, 141. For Verizon’s GTE service areas, including its Illinois service areas, this targeting must continue until interstate average traffic sensitive charges are reduced to 0.55 cents per minute. Id., ¶142

The FCC describes the rationale for this reduction, stating “[b]y driving switched access usage charges closer to their actual costs more quickly than would occur under the existing price cap regime, the *CALLS* proposal will minimize the competitive advantages BOC affiliates would have over IXC’s in

offering long-distance services while switched access rates were significantly above cost.” CALLS Order, ¶158. In addition the FCC notes “...we observe the target rates are not predatory. To engage in predatory practices, a price cap LEC would have to charge rates below its incremental costs to drive out its competitors, and then raise prices to monopoly levels after the competitors have left the market. ... [T]he CALLS signatory LECs have agreed to charge these rates for a sustained period of time, which they would not do if the rates were predatory.” Id., ¶170. Therefore, the FCC has determined, and by signing onto the CALLS agreement both GTE and Bell Atlantic have agreed, that the 0.55 cent target average traffic sensitive rate was not below GTE’s, and now Verizon’s, incremental cost of providing these services.

As indicated above, interstate average traffic sensitive charges are comprised of both switching (end-office and tandem switching) and transport components of interstate switched access. However, even if one ignores all of Verizon’s transport and tandem switching LRSIC + Common cost estimates, Verizon’s end-office switching component by itself, which Verizon estimates to cost in excess of 0.60 cents a minute, exceeds the FCC’s target figure of 0.55 cents per minute. This evidence strongly suggests that Verizon’s LRSIC + Common cost estimates are unreasonable.

Dr. Zolnierek replicated the methodology used to compare Verizon’s proposed LRSIC + Common cost estimates to Verizon’s interstate access charges. See Staff Ex. 2.0 at 14-15, Attachment 1.5. He calculated revenues using current intrastate access rates and year 2000 intrastate demand levels. Id.

He then compared this revenue against revenue calculated using year 2000 demand and Verizon's proposed LRSIC + Common Cost estimates. Id.

This comparison suggests Verizon's LRSIC + Common Cost estimates presented in Direct Attachment TD-5 are unreasonable. Verizon's proposed LRSIC + Common cost estimates increase switched access charges by almost 17%. Staff Ex. 2.0 at 15, Attachment 1.5. Verizon has presented no explanation for such an increase in its prefiled testimony, and Staff has no reason to believe these charges should increase. Staff Ex. 2.0 at 15. In fact, there are numerous reasons to believe that Verizon's costs should have *decreased* in this filing. Id.

First, in its Order in Illinois Commerce Commission On Its Own Motion vs. Illinois Bell Telephone Company; et al., Investigation into Non-Cost Based Access Charge Rate Elements in the Intrastate Access Charges of Incumbent Local Exchange Carriers in Illinois; Illinois Commerce Commission On Its Own Motion, Investigation into Implicit Universal Service Subsidies in Intrastate Access Charges and to Investigate how these Subsidies should be Treated in the Future; Illinois Commerce Commission On Its Own Motion, Investigation into the Reasonableness of the LS2 Rate of Illinois Bell Telephone Company, ICC Docket Nos. 97-0601; 97-0602; 97-0516 (consol.) (March 29, 2000) (hereafter "Access Charge Order") the Commission found Verizon's switched access rates excessive and ordered Verizon to reduce these charges to LRSIC-based levels. Access Charge Order at 80. In its decision in that proceeding the Commission noted that "...reducing access charges to LRSIC plus a reasonable allocation of joint and common costs will help level the competitive playing field in Illinois and

require all carriers to compete on the basis of quality, price, innovation and efficiency. “ Id. at 34. Certainly, Verizon’s submission of switched access costs that exceed its existing rates for these services is not consistent with the Commission’s directive that rates should be reduced by moving to economic costing principles.

The Commission’s expressed belief that this proceeding would decrease access charges is consistent with Verizon’s own commitment to do so. As noted in the Commission’s Order approving the merger of GTE and Bell Atlantic, GTE and Bell Atlantic agreed to “...reduce rates by \$10.03 million upon merger consummation to account for earnings and merger savings. The rate reduction will be achieved by reducing IntraLATA toll rates by \$1.68 million, residential and business local usage rates by \$6.6 million and access charges by \$1.74 million...” Id. Assuming that Verizon has at some point reduced these rates based on this commitment, it now seeks to negate the effect of this undertaking by increasing access charges by \$3.7 million in this proceeding. This concern must be addressed.

There is significant evidence to suggest that the reductions expected by the Commission, and the reductions Verizon has committed to, are consistent with trends in forward looking costs in Verizon’s service territory. First and foremost, GTE’s merger with Bell Atlantic places the former GTE Illinois service territories under the umbrella of Verizon, the largest local exchange carrier in the

country.¹⁵ This certainly affords Verizon as much purchasing power as, if not more than, any other local exchange carrier in the country. Staff Ex. 2.0 at 17. Such purchasing power should, and almost certainly does, permit Verizon to purchase switching and other equipment at prices as low, if not lower, than any other domestic local exchange carrier. Id. Furthermore, it is reasonable to expect that, consistent with Commission approval of the GTE merger with Bell Atlantic, the merger affords Verizon the ability to serve its intrastate access customers at rates as low as, if not lower than, would have been possible absent the merger. Id.

In the Ameritech Illinois Alternative Regulation Review Proceeding, Ameritech recommended, and Staff endorsed as a reasonable measure of cost changes in the industry, the application of both inflation and “X” factor adjustments to prices. Order at 84 et seq., In the Matter of Illinois Bell Telephone Company Application for Review of Alternative Regulation / Petition to Rebalance Illinois Bell Telephone Company’s Carrier Access and Network Access Line Rates / Citizens Utility Board and People of the State of Illinois v. Illinois Bell Telephone Company, Docket Nos. 98-0252/98-0335/00-0764 (Consolidated) (December 30, 2002) (hereafter “Alt Reg Order”). The “X” factor adopted in that proceeding is comprised of two components: (1) a productivity dividend of 1.3%, and (2) an input price differential of 2.0%. Alt Reg Order at 84 et seq.; 88. The product of these components produces an industry-wide “X” factor of 3.3%. Id. It is notable that this figure is below recent X factor figures recommended by GTE

¹⁵ Verizon Communications is reported by the FCC as the local exchange carrier with the most loops as of December 31, 1999. See FCC, Common Carrier Bureau, Industry Analysis Division, Trends in Telephone Service, August 2001, Table 8.3.

to the FCC. For example, in comments to the FCC, on FCC Staff proposed productivity figures, GTE indicated “[a]ny reasonable projection of X, based on the TFP estimates approved in 1997, would set the X factor at a significantly lower level. USTA shows that the average of the estimates of annual X-factor growth produced by the 1997 model for the period 1991-1998 is 4.12 percent.” GTE Comments at 3, CALLS Proceeding (January 7, 2000).

Similarly referring to a study by its own witness, GTE indicated in January 2000 comments to the FCC that “[t]he ARIMA method can be used to forecast the X-Factor alone, based on a historical series of estimated X-Factors from the 1997 model. Dr. Duncan finds that, used in this manner, the ARIMA process predicts an X-Factor of 4.62 percent for next year.” GTE Reply Comments at 5-6, CALLS Proceeding (January 24, 2000). Such evidence of *decreasing* costs cannot be reconciled with Verizon’s nearly 17% *increase* in switched access costs. While Verizon’s Illinois service territory is more “rural” than many of its other holdings, as a part of the largest local exchange carrier in the country, Verizon enjoys ample opportunities to take advantage of general industry productivity and input differentials. Again, such evidence suggests that Verizon’s estimates are unreasonable.

Dr. Zolnierek examined Verizon’s proposed LRSIC + Common cost estimates relative to previous Verizon cost estimates, interstate rates and charges for similar services, Commission expectations, and events specific to Verizon’s Illinois operations. Staff Ex. 2.0 at 19. Each examination has, on its own, indicated reason to believe that Verizon’s LRSIC + Common cost estimates

are unreasonable. Dr. Zolnierek nonetheless acknowledged the shortcomings inherent in these individual comparisons. However, any weaknesses in these individual analyses do not overcome the fact that the body of evidence indicates that Verizon's estimates are unreasonable. Staff Ex. 2.0 at 19.

Verizon, not the Staff or intervenors, has the burden of developing accurate switched access cost estimates consistent with Commission and FCC rules and regulations and demonstrating that these estimates are both accurate and consistent with applicable rules and regulations.

In its *Access Charge Order*, the Commission ordered "...that any future access filings made by non-rural LECs should include not only the filing of proposed rates, but also the filing of forward-looking cost studies consistent with Parts 791 and 792 of the Illinois Administrative Code." Access Charge Order at 47. Specifically the Commission noted that all switched access rate elements "should be priced at their underlying long run service incremental cost, or LRSIC, plus a reasonable allocation of shared and common costs." Id. at 48. While the rates themselves are not specifically at issue in this proceeding, the fact that the access costs generated by ICM – which drive access rates – are facially unreasonable is another reason to reject the model.

F. The Commission should order the use of FCC proxies as interim UNE rates.

Section 51.513(a) of the FCC administrative rules provides that:

A state commission may determine that the cost information available to it with respect to one or more elements does not support the adoption of a rate or rates that are consistent with the requirements set forth in Secs.

51.505 and 51.511. In that event, the state commission may establish a rate for an element that is consistent with the proxies specified in this section, provided that:

(1) Any rate established through use of such proxies shall be superseded once the state commission has completed review of a cost study that complies with the forward-looking economic cost based pricing methodology described in Secs. 51.505 and 51.511, and has concluded that such study is a reasonable basis for establishing element rates; and

(2) The state commission sets forth in writing a reasonable basis for its selection of a particular rate for the element.

47 CFR 51.513(a)

This provision clearly authorizes the Commission to establish rates for network elements where adequate cost information is lacking. The Staff urges the Commission to do precisely this.

Verizon filed this proceeding over four years after the enactment of the 1996 federal Telecommunications Act. Now, very nearly three years later, it appears that the Commission will not have adequate cost information upon which to determine rates for some considerable time to come.¹⁶ First, as has been shown above, Verizon's ICM model cannot and does not produce rates that can be shown to be consistent with 47 CFR 51.505. At best, ICM will require significant, and presumably time-consuming, modifications before it can be used to develop TELRIC-compliant rates. Second, the Staff is informed and believes that it is Verizon's intention to cease using ICM, and begin to employ another cost model, in the near future. While the Commission's decision regarding modeling methodology in this proceeding will no doubt assist Verizon in refining

¹⁶ The Staff does not imply that Verizon has been dilatory.

its new model to a point of TELRIC compliance, it is nonetheless likely that additional proceedings will be necessary. This, again, is likely to take significant time – without rates in place.

Were interim rates in place, this would not be a source of concern, as CLECs would then be in a position to purchase UNEs with some degree of certainty as to price, and Verizon would be made whole in the event that the interim rates ultimately proved to be inadequate. However, no such rates exist – seven years after the passage of the federal Telecommunications Act. This is a state of affairs that cannot be permitted to continue. The Commission can, and should adopt the FCC proxy rates until rates can be determined.

The proxy rates established by the FCC for Illinois are as follows:

- Local loop: \$13.12¹⁷;
- ULS (port)¹⁸: \$1.20-2.00 per port per month¹⁹;
- Dedicated transport: To mirror Verizon's federal tariffed rates;²⁰
- Shared Transport, tandem to end office: Not to exceed equivalent DS1/DS3 rates²¹;
- Tandem switching: Not to exceed \$0.0015 per MOU²²;
- Signaling, call related databases, other elements: To mirror Verizon's effective rates for equivalent services in its interstate access tariffs²³.

Verizon has collocation rates on file. See *Order on Rehearing, Verizon North Inc. and Verizon South Inc.: Proposed establishment of collocation tariffs*

¹⁷ This rate is established by 47 CFR 51.513(c)(1);

¹⁸ The FCC established proxy rates for any usage sensitive component to ULS. See 47CFR 51.513(c)(2)(i). As Verizon does not incur switching costs on a usage sensitive basis, see, e.g., Staff Ex. 2.0 at 29, *et seq.*, the flat rate is proper here.

¹⁹ This rate is established by 47 CFR 51.513(c)(2)(ii)

²⁰ This rate is established by 47 CFR 51.513(c)(3).

²¹ This rate is established by 47 CFR 51.513(c)(4).

²² This rate is established by 47 CFR 51.513(c)(5).

²³ This rate is established by 47 CFR 51.513(c)(7)

(Tariffs filed on June 21, 2000), ICC Dockets No. 00-0511/0512 (consol.) (November 29, 2001). Accordingly, proxy rates need not be set for collocation.

III. Responses to Administrative Law Judge's Questions

As noted in Section I of this brief, the ALJ to this proceeding directed the parties to address certain questions in a Notice dated June 23, 2003. See ALJ's Notice, Attachment at 2-3. The ALJ subsequently indicated that, to the degree the questions posed do not relate to the issues contained in the July 11 issues list, they need not be answered. Staff has attempted to answer these questions to the extent that they fit within the confines of the July 11 issues list in Section II. In doing so, the answers to these questions are perhaps difficult to access. This section serves to more clearly and directly address the ALJ's concerns.

Question 1: Staff asserts that Verizon has admitted that ICM "cannot model fewer DLCs, even under the 18-kf loop-length restrictions" (Staff Brief at 10). This assertion is supported by a citation to Verizon Exhibit 2.0 at 14,15, yet a review of this exhibit reveals no such statement. Is Staff's position that ICM is not subject to modification and if so, what is the support for the assertion?

Verizon Exhibit 2.0 is the Rebuttal Testimony of David Tucek. Tr. at 21. Starting on page 14 and continuing on to page 15, Mr. Tucek states that:: "For one thing, given the 12kFt (or 18kFt) copper loop length restriction modeled by ICM, there is no way to model fewer DLCs." Verizon Ex. 2.0 at 14-15. This statement is the basis for the Staff's assertion.

Question 2: In terms of demand figures, Staff argues that new demand figures cannot be imputed into ICM. What is the basis of this assertion?

Verizon witness David Tucek states as follows:

Q. IS MR. KOCH'S SUGGESTION THAT VERIZON SHOULD HAVE USED 2000 CENSUS DATA TO MODEL CUSTOMER LOCATIONS FEASIBLE?

A. No, it is not. *TNS Telecoms, the successor company to PNR Associates, no longer produces or markets the business and residential subscriber data by census block that Verizon used as part of its modeling of customer location. Even if they did, all of the 2000 census data required to produce this information has not yet been released, and once it is released, it would take approximately three months to complete such a project just for Illinois. In addition to the time required to produce the data provided by PNR, an additional 60 days is needed to map this information to the grids used by ICM, and to true up the line counts to actual ARMIS totals for each wire center. Consequently, it is not possible for Verizon to have taken the course of action suggested by Mr. Koch because the required data were not, and still are not, available.*

Verizon Ex. 2.0 at 35-36 (emphasis added)

Thus, the assertion in question is firmly based in Verizon's own testimony.

Question 3: Staff also argues, in the portion of its Brief discussing access charges, that Verizon failed to supply the demand figures used in its computations. Verizon replies, in a Section titled "Switching Costs" that it was not required to perform the calculation requested by Staff. Is this issue part of the settlement of access charges? How does the assertion that a calculation was not required respond to the assertion that demand figures were not provided?

To the extent this issue pertains to access charge rates, parties to the Settlement have agreed that the Commission need not set access charges in this

proceeding. However, Staff's argument regarding Verizon's failure to supply demand information constitutes general criticism of the ICM model, going directly to the question of the model's transparency and flexibility. Section 791.60(d) of the Commission's rules state:

Demand Information. The carrier shall provide the demand figures and/or forecast(s) used in the LRSIC computations and an explanation detailing the explicit and implicit assumptions and methods used to derive the figures and/or forecast(s). Demand forecasts for new services shall reflect total demand for the service, averaged over the projected revenue producing life of the service.

83 Ill. Admin. Code 791.60(d)

As noted above, Staff has been unable, either independently or through the issuance of data requests to the company, *see, generally*, Staff Ex. 2.1 at 12-19, to derive or obtain all explicit and implicit assumptions used to derive the figures and/or forecast(s) used by Verizon. This prevented Staff (as it presumably also prevented Verizon) from verifying that the ICM model – inextricably linked to SCIS/COSTMOD – produces reasonably accurate switch cost estimates. Verizon's argument that it is not required to perform this calculation should be rejected. Even if it is not required to make the explicit calculation, it is nonetheless required under Section 791.60(d) to explain all explicit and implicit assumptions used to derive demand figures and/or forecasts used in the model. Had Verizon done so, Staff could have made the calculation that the company failed or refused to make. If Verizon cannot produce such information for its models, the Commission must conclude that Verizon's ICM model is not

transparent, not capable of being properly audited, and therefore not acceptable for modeling UNE switch costs.

Question 4: Staff includes a subsection (2) Methodology for Switched access and UNE Rates is Deficient) in a section of its Brief apparently addressing only Switched Access (B. Switched Access Rates Inconsistent with State and Federal Law). Do the arguments in the subsection go only to switched access and are they the subject of the switched access settlement?

To the extent this issue relates to the setting of access rates, Staff agrees that the Commission need not do so in this proceeding. However, the points raised by Staff in this section all go to the inability of Verizon's model to properly determine UNE switch rates.

Question 5: Are the arguments in (3) Allocation of Cost Methodology is Unsupported limited to switched access and subject to the settlement of those issues? Do the arguments relating to Common costs go to inputs or inherent flaws in ICM?

To the extent this issue pertains to access charge rates, parties to the Settlement have agreed that the Commission need not set access charges in this proceeding. However, Staff's argument regarding the model's ability – or lack thereof – to properly determine UNE switch rates constitutes general criticism of the ICM model, going directly to the question of the model's transparency and flexibility. Specifically:

1) Shared costs -- the issues that Staff raised regarding Verizon's shared cost estimates are properly characterized as a feature of the ICM model, and not

an input issue. In particular, ICM produces "TELRIC w" or "TELRIC w/o" shared cost estimates, which indicates that their shared cost methodology is buried within ICM. The Staff criticized the wide range of shared cost percentages produced by ICM, and the fact that it had no access to the manner in which Verizon assigned shared costs between its "retail" network and its "wholesale" network estimates. All criticisms of Verizon's shared cost *modeling* included in Staff's Initial Brief are properly termed "model" issues.

2) Common cost study – Staff is satisfied that Verizon's common cost study is also embedded within ICM. Although Staff had criticized the choice of inputs, the basis for the cost study, etc., and Verizon produced a subsequent run with slightly altered inputs, Verizon's common cost 'factor' is based on ICM's estimate of its common costs. This is demonstrated 1) in Staff Witness Judith R. Marshall's Revised Schedule 1 at 3, see Staff Ex. 4.0, which reproduces ICM's common cost account estimates, and 2) Verizon witness Terry R. Dye's testimony and schedules, see, e.g., Verizon Ex. 4.0, Attachment TD-1 (containing multiple references to the ICM CD). Further, it is Staff's understanding that the input table for common costs included in the ICM model is very complex, and Staff witnesses have stated that Verizon appears to consider the construction of the ICM inputs to be a complicated, proprietary matter. See, *generally*, Staff Ex. 2.0, 2.1, 5.0, 5.1.

IV. Conclusion

The Staff recommends that the Commission reject ICM. It is not transparent, flexible or auditable. It does not model the correct copper loop lengths and resulting number of DLCs. It develops wholesale rates that exceed retail rates, and unreasonably high access charges. It improperly models two separate networks: wholesale and retail. In short, the model in its present form cannot be used to develop TELRIC costs. While Verizon is reconfiguring the model, or until it submits satisfactory cost studies based upon a new one, the Commission should impose FCC proxy rates, as described in 47 CFR 51.513.

WHEREFORE, the Staff of the Illinois Commerce Commission respectfully requests that its recommendations be adopted in their entirety consistent with the arguments set forth herein.

Respectfully Submitted,

/s/_____

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August 1, 2003

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